

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-000508**Date Inspected:** 04-Apr-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 0**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 12**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dau, Shanghai

<b>Quality Control Contact:</b>	ABF Paint Supervisor William (Bill) Oak			<b>Quality Control Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Material transfer:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Sampled Items:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Stock Transfer:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>OK to Cut:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Rebar Test Witness:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Delayed/Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Other:</b>	Surface Preparation and Coatings Application						
<b>Bridge No:</b>	34-0006			<b>Component:</b>	Galvanizing, Miscellaneous Metal		
<b>Bid Item:</b>	79			<b>Lot No:</b>	B226		

**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Donald Jordan arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Galvanizing

ABF received an email notification that the handrail pieces being repaired that could not be galvanized yesterday were ready for inspection. American Bridge/Fluor Enterprises, a JV (ABF) Paint Supervisor William (Bill) Oak, ABF Structural Supervisor Don Walton and ZPMC QC Tao Lei accompanied Mr. Jordan to the galvanizing plant. The handrails that were dipped in the acid bath yesterday and been soaking for 24 hours and the surfaces were still not clean. The protective coating on the metal was not being removed by the acid. ABF suggested that the pieces be abrasive brush blasted to remove the coating and rust prior to transporting to the galvanizing facility. That way all the defects can be identified and repaired in the blast shop allowing the galvanizing facility to spend as little time as necessary to treat and galvanize the steel. The ZPMC Galvanizing Shop Foreman Mr. Lv agrees with this suggestion.

The following inspection were performed by Caltrans QA Coatings Inspector Jordan, American Bridge/Fluor Enterprises, a JV (ABF) Paint Supervisor William (Bill) Oak, ABF QC Zhou Qun Song (Joe), ABF QC Shi Zhaoyuan (Stone), ABF QC Zhou Wei, International Paint Onsite Technical Services Engineer Peng Zi Li, Zhenhua Port Machinery Company, LTD (ZPMC) Production Manager Bevin Dong, ZPMC QC Manager Xia Yong, ZPMC QC Zhang Diang, ZPMC QC Dong Yao Fei and ZPMC QC Guo Wan Li.

Miscellaneous Metal

Caltrans QA Coatings Inspectors received a Notice of Inspection for abrasive blasting of

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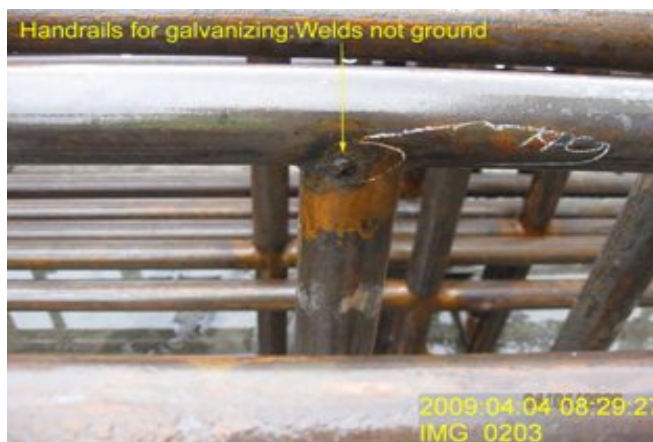
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cable tray assembly framework faying surfaces. Fabrication of the framework was not complete. Some locations had welds missing. There were several broken welds and many that had so many pin holes that it looked like the surface of a sponge. The bolt hole areas were primed and the pieces will be sent back to fabrication for completion.

Caltrans QA Coatings Inspectors received a Notice of Inspection for abrasive blasting of 360 splice plates. Grinding was performed on the edges of the plates. After the grinding the plates were re-blasted and inspected. The abrasive blasted surfaces, blast profile, and ambient conditions were within the contract required maximum and minimum ranges.

Caltrans QA Coatings Inspectors received a Notice of Inspection for abrasive blasting of 2 counter weight sections. A few spots of weld spatter were removed by grinding. The spots were re-blasted. Interzinc 22 was applied to the internal and external surfaces. The corners of these units are full welded on the inside where concrete will be poured. The external surface that will be exposed to the elements are spot welded. This leaves cracks between the plates that will require caulking and constant maintenance.

Caltrans QA Coatings Inspectors received a Notice of Inspection for abrasive blasting of 29 box beam faying surfaces, 3 sets of balance weight, 45 hexagonal splice for corner unit support X37, 15 cover plates for box beams, and 5 sets of cable support structure pieces. Edges requiring grinding, arc strikes and other defects were marked up and repaired. After the repairs were completed the plates were re-blasted. The re-blast was acceptable for primer application. The ambient conditions and surface profile were within the contract required ranges. Interzinc 22 was mixed and applied.



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### Summary of Conversations:

There were no relevant conversations on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh (China) +8613472477571, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Jordan,Don	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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